CLAIMS

Claim 1. (Currently amended) A method of identifying a signal type for an unknown signal comprising the steps of:

selecting the unknown signal from a displayed spectral waveform for a specified range of frequencies;

processing spectral data representing the unknown signal to ascertain characteristics of the unknown signal without demodulating the unknown signal; and

from the characteristics of the unknown signal determining an identification of the signal type.

Claim 2. (Previously amended) The method as recited in claim 1 wherein the determining step comprises the step of comparing the frequency of the unknown signal with a database of spectral assignments for a plurality of known signal types to identify the signal type.

Claim 3. (Previously amended) The method as recited in claim 1 wherein the processing step comprises the step of estimating from the spectral data an occupied bandwidth for the unknown signal as one of the characteristics for input to the determining step.

Claim 4. (Previously amended) The method as recited in claim 3 wherein the processing step further comprises the step of estimating from the spectral data a complementary cumulative distribution function of the peak power for the unknown signal as one of the characteristics for input to the determining step.

Claim 5. (Original) The method as recited in claim 4 wherein the determining step comprises the steps of:

inhibiting the estimating step for the complementary cumulative distribution function if the occupied bandwidth is unique to a known signal type; and

determining the identification for the signal type based upon the complementary cumulative distribution function if the occupied bandwidth is common to more than one known signal type.

Claim 6. (Previously amended) A method of discriminating between modulation signals comprising the steps of:

selecting one of the modulation signals as a signal of interest from a displayed spectral waveform for a specified frequency range;

estimating an occupied bandwidth for the signal of interest from data representing the signal of interest;

estimating a complementary cumulative distribution function of peak power from the data for the signal of interest where the occupied bandwidth is common to more than one known signal type;

reporting an identification of the signal type as a function of the complementary cumulative distribution function.